DENSITRON

STANDARD VALUE ADDED OPTIONS FOR DOT MATRIX LCD CHARACTER MODULES

CHARACTER

DENSITRON LIQUID CRYSTAL DISPLAY MODULES. 5x7 DOT MATRIX WITH CURSOR, LARGE CHARA- CTER, WIDE VIEWING ANGLE, SUNLIGHT&NIGHT READABILITY WITH E-L BACKUP LIGHTING.

NEW LARGE CHARACTER LOW COST LCD DISPLAY MODULES

LM73X4C16CY FOR COMPACT DESIGN 4 LINE 16 CHARA. DISPLAY MODULE

LCD DOT MATRIX DISPLAY W/ DRIVER AND CONTROLLER

SMALLEST
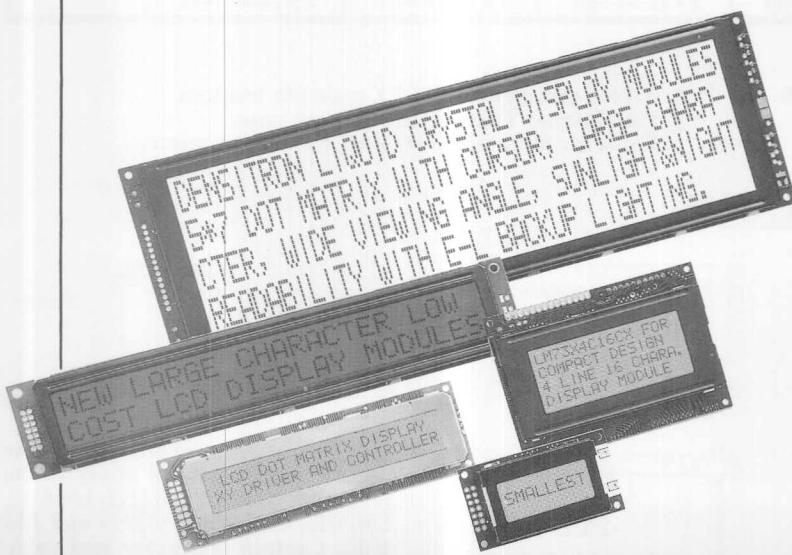
INTRODUCTION

Densitron offers the standard value added options described below for its extensive range of Alphanumeric LCD Modules. This value added service enables the design engineer to easily select the appropriate connector/cable configuration for a particular application. The engineer is thus assured of getting a complete display sub-assembly built to his specification and 100% tested before shipment. This service will benefit customers, by reducing the costs of purchasing and stocking connectors and cables, as well as the manufacturing costs involved in assembling and testing these display sub-assemblies. Hidden cost such as scrap and reworked parts will also be eliminated.

Apart from these standard options, Densitron can offer other value added and custom configurations to meet your specific needs. Please contact one of Densitron's local sales representatives for details; or send your specifications directly to Densitron for quotation.

I/O PIN CONNECTOR OPTIONS

Table 1: STRAIGHT PIN VALUE ADDED OPTIONS

| OPTION EXTENSION	I/O PIN CONFIGURATION MOLEX SERIES#	PP1 & PP3 70343	PP2 8624	PP4, PP5 & PP6 8624	PP8 70343	PRICE ADDER
SP	Male 0.24" pin header	22-54-1414	10-89-1141	10-89-1161	22-54-1415	$2.00
SPE	Male 0.32" pin header	22-54-1214	10-89-1143	10-89-1163	22-54-1215	$2.00
SPL	Male 0.24" pin header plus two 12" 24awg black/red lead wires (UL1061) for backlight connection	22-54-1414 2 x 12" wire	10-89-1141 2 x 12" wire	10-89-1161 2 x 12" wire	22-54-1415 2 x 12" wire	$3.00
SPEL	Male 0.32" pin header plus two 12", 24awg black/red lead wires (UL1061) for backlight connection	22-54-1214 2 x 12" wire	10-89-1143 2 x 12" wire	10-89-1163 2 x 12" wire	22-54-1215 2 x 12" wire	$3.00
SPP	Male 0.24" pin header plus two 0.24" straight pins for backlight connection	22-54-1414 2 x 22-54-1401	10-89-1141 2 x 22-54-1401	10-89-1161 2 x 22-54-1401	22-54-1415 2 x 22-54-101	$3.00

Table 2: RIGHT ANGLE PIN VALUE ADDED OPTIONS

OPTION EXTENSION	I/O PIN CONFIGURATION MOLEX SERIES#	PP1 & PP3 70344	PP2 7723	PP4, PP5 & PP6 7723	PP8 70344	PRICE ADDER
RP	Male 0.24" pin header	22-12-5314	10-91-1141	10-91-1161	22-12-5315	$2.00
RPE	Male 0.32" pin header	22-12-5114	10-91-1143	10-91-1163	22-12-5115	$2.00
RPL	Male 0.24" pin header plus two 12" 24awg black/red lead wires (UL1061) for backlight connection	22-12-5314 2 x 12" wire	10-91-1141 2 x 12" wire	10-91-1161 2 x 12" wire	22-12-5315 2 x 12" wire	$3.00
RPEL	Male 0.32" pin header plus two 12", 24awg black/red lead wires (UL1061) for backlight connection	22-12-5114 2 x 12" wire	10-91-1143 2 x 12" wire	10-91-1163 2 x 12" wire	22-12-5115 2 x 12" wire	$3.00
RPP	Male 0.24" pin header plus two 0.24" straight pins for backlight connection	22-12-5314 2 x 22-54-1401	10-91-1141 2 x 22-54-1401	10-91-1161 2 x 22-54-1401	22-12-5315 2 x 22-54-1401	$3.00

NOTES:
1. All connectors are mounted on back of module PCB
2. Pin plating: 15 microinches (min) select gold
3. $I_{max} = 3.0A$; Insulation Resistance = 1000 Mohms
4. All connectors are MOLEX male pin headers
5. Pin Material: Drawn 0.025" square wire
6. Dielectric Strength = 600 VAC r.m.s. for 1 minute

I/O PIN CONNECTOR CONFIGURATIONS
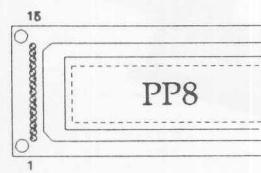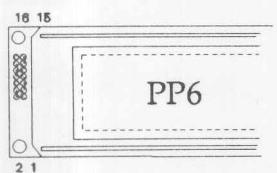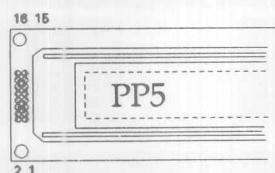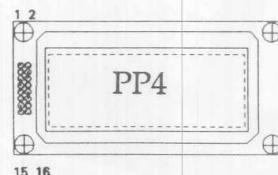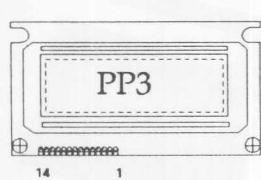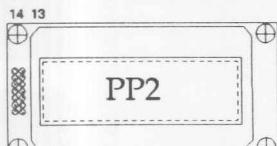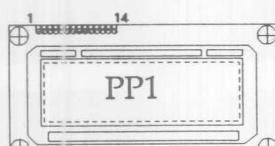
Note: These standard pin value added options do not apply to the following models: LM2212, LM4212, LM2043, LM4043, LM2045 and LM 4045. Custom connector and cable assemblies are available for these models.

EL/LED LAMP CONNECTOR OPTIONS

Flying-lead Connections for Backlight (SPL, SPEL, RPL & RPEL Options)
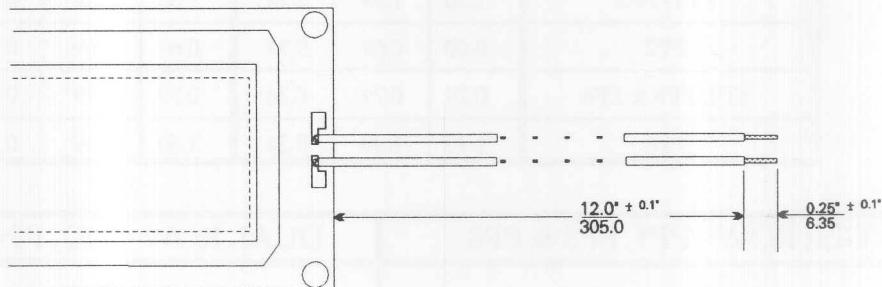
Straight Pin Connections for Backlight (SPP & RPP Options)
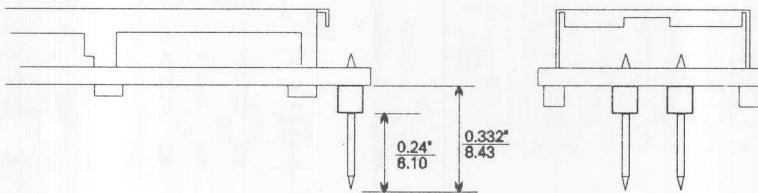
ORDERING INFORMATION

To order a particular value added option simply add the value added option part number extension from Table 1 or Table 2 to the end of the standard Densitron part number. For example to order a blue-mode supertwist LM44, 4 by 40 alphanumberic LCD, with transmissive polarizer, extended length straight pin connector and EL lamp leads, order the following part number:

<div align="center">

LM44E4C40CSB-SPEL

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DENSITRON INTERNATIONAL OFFICES

DENSITRON CORPORATION AMERICA (Western Region)   3425 West Lomita Blvd., Torrance, CA 90505
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DIMENSIONAL INFORMATION

OPTIONS	SP & RP			SPE & RPE		
DIMENSIONS (Inches)	A	B	C	A	B	C
PP1/PP3	1.30	1.39	.024	1.30	1.39	0.32
PP2	0.60	0.69	0.24	0.60	0.69	0.32
PP4, PP5 & PP6	0.70	0.79	0.24	0.70	0.79	0.32
PP8	1.40	1.49	0.24	1.40	1.49	0.32

SINGLE ROW - PP1, PP3 & PP8

SINGLE ROW STRAIGHT PIN

SINGLE ROW RIGHT ANGLE PIN

DUAL ROW - PP2, PP4, PP5, & PP6

DUAL ROW STRAIGHT PIN

DUAL ROW RIGHT ANGLE PIN
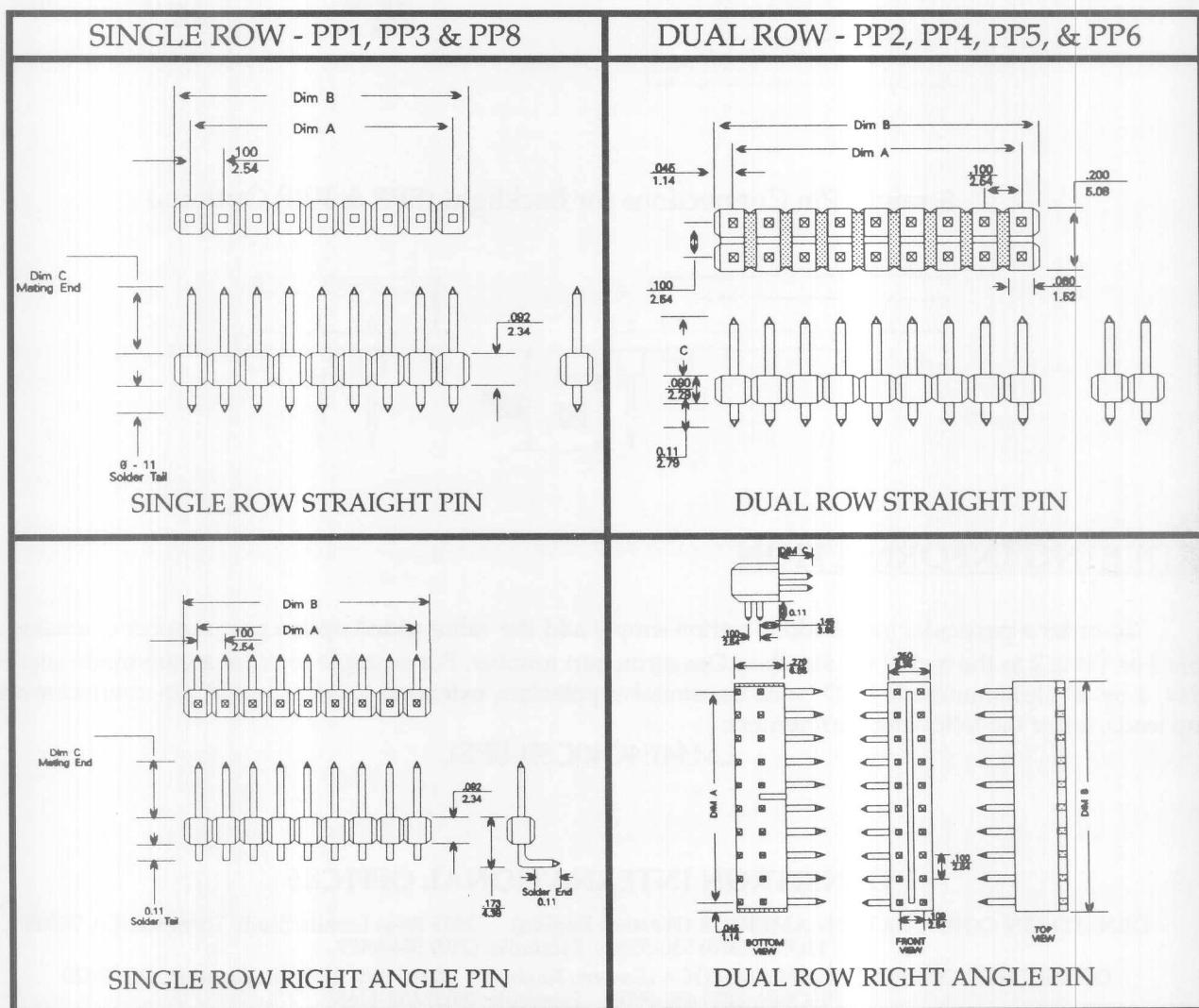
MATING CONNECTOR INFORMATION

MATING CONNECTOR TYPE (MOLEX single or dual row female connectors on 0.1" centers:)	SINGLE ROW CONNECTORS PP1, PP3 & PP8	DUAL ROW CONNECTORS PP2, PP4, PP5 & PP6
	MOLEX SERIES #	MOLEX SERIES #
PCB	90147, 90184	70192, 7990
Single Row Insulation Displacement	70400-A	70400-A, 70451-A
Single Row Crimp	70066-A	70066-A, 70450-A
Flat Flex Cable	70430-A, 40556	40312
Insulation Displacement Wire Harness	7720, 7690	70430-A, 40556

Densitron recognizes all trademarks and trade names referenced in this brochure.